The International Council on Electrical Engineering Conference 2025

July 8-11, 2025 Wuhan, China

Program at a Glance

July 8 (Tue)

10:00-20:00	
No. 2 Tingtao Floor	● **Registration & Sign–in**

July 9 (Wed)

09:00-12:35	
Huanghe Hall	● **Opening Ceremony & Keynote Session**
14:00-17:20	
Shennongjia Hall	● **Panel 1: Advanced motor and control technology**
Tianmen Hall	● **Panel 2: High voltage flexible transmission technology**
Qianjiang Hall	● **Panel 3: Renewable access and dispatch operation**
Jingzhou Hall	● **Panel 4: Intelligent hydropower and hydro–wind–solar integration**
Xuelian Hall	● **ICEE Council & STC Meeting**

July10 (Thur)

9:00-12:20	
Shennongjia Hall	● **Panel 5: Energy storage and electric vehicles**
Tianmen Hall	● **Panel 6: Power electronics devices and equipment**
Qianjiang Hall	● **Panel 7: Electrical equipment and intelligent technologies**
Jingzhou Hall	● **Panel 8: Intelligent operation technology of power distribution system**
14:00-17:20	
Shennongjia Hall	● **Panel 9: Operation and control technologies of microgrids and distribution grids**
Tianmen Hall	● **Panel 10: Artificial Intelligence for Power System Operation and Control**
Qianjiang Hall	● **Panel 11: Electricity–carbon synergies and electricity markets**
Jingzhou Hall	● **Panel 12: Youth Forum**

July 11 (Fri)

9:00-12:20	
Shennongjia Hall	● **Panel 13: High Voltage Forum – Environmental friendly insulating gases**
Tianmen Hall	● **Panel 14: High Voltage Forum – High voltage engineering and lightning protection technologies**
Qianjiang Hall	● **Panel 15: High–penetration power electronics–dominated power systems**
14:00-17:00	
Tech Safari	

2025 年电机工程国际会议（ICEE2025）

中国・武汉　　7 月 8-11 日

简明技术日程

7月8日（周二）

10:00-20:00	
听涛 2 号楼大堂	● 注册报到

7月9日（周三）

09:00-12:35	
黄鹤厅	● 开幕式及主旨报告
14:00-17:20	
神农架厅	● 专题研讨会 1：先进电机及控制技术
天门厅	● 专题研讨会 2：高压柔性输电技术
潜江厅	● 专题研讨会 3：可再生能源接入与调度运行
荆州厅	● 专题研讨会 4：水风光系统与装备协同智能
雪莲厅	● ICEE 理事会会议及技术委员会会议

7月10日(周四)

9:00-12:20	
神农架厅	● 专题研讨会 5：储能与电动汽车
天门厅	● 专题研讨会 6：电力电子器件与装备
潜江厅	● 专题研讨会 7：电气设备与智能技术
荆州厅	● 专题研讨会 8：配电网智能运行技术
14:00-17:20	
神农架厅	● 专题研讨会 9：微电网运行与控制技术
天门厅	● 专题研讨会 10：人工智能在电力系统运行与控制中的应用
潜江厅	● 专题研讨会 11：电力 - 碳协同与电力市场
荆州厅	● 专题研讨会 12：青托论坛

7月11日(周五)

9:00-12:20	
神农架厅	● 专题研讨会 13：高电压论坛 - 环保型绝缘气体
天门厅	● 专题研讨会 14：高电压论坛 - 高电压工程与防雷技术
潜江厅	● 专题研讨会 15：高电力电子渗透率电力系统
14:00-17:00	
工程技术坊	

8. Technical Program

8.1 Opening Ceremony

Chair: Chen Mei

Time: 9:00-9:55, July 9

Room: Huanghe Hall

Time	Speakers
Welcome Speech	**Meng Hui** The Deputy Mayor of Wuhan Municipal People's Government
	Ono Yasushi President, The Institute of Electrical Engineers of Japan
	Lee Jun Ho President, The Korean Institute of Electrical Engineers
	Chow Kin Tak Alice President, the Hong Kong Institution of Engineers
	Chen Huidong Assistant to the President of Wuhan University
Opening Remarks & Keynote Speech	*The Development and Practice of China´s New Type Power System* **Guo Jianbo** Vice President of Chinese Society for Electrical Engineering Honorary President of China Electric Power Research Institute

Keynote Session

Chairs: Prof Dong Xuzhu, Dr Zhao Jianjun

Time: 9:55-12:25, July 9

Room: Huanghe Hall

Time	Keynote Session
09:55-10:20	*Beidou–3/GNSS: Key Infrastructure for Smart Grid* **Liu Jingnan** Professor of Wuhan University
10:20-10:45	*Japanese 7th Strategic Energy Plan and Its Technical Challenge* **Baba Jumpei** Professor of The University of Tokyo
10:45-11:10	*Control of a Single–Inverter Dual–Motor Drive System Using PM* **Lee Kyo Beum** Professor of Ajou University
11:10-11:35	*Protection Challenges and Strategies for Power Systems with High Renewable Energy Integration* **Chan Fuk Cheung** Past Paresident of the Hong Kong Institution of Engineers
11:35-12:00	*Development of DC Transmission Technology for Offshore Wind Power and the Exploration and Practice of China Three Gorges Corporation* **Tang Bojin** Deputy Director of Science and Technology Research Institute, China Three Gorges Corporation
12:00-12:25	*Application Practice and Prospect of Spatio–Temporal Digital and Intelligence Technology in Power Grids* **Chen Xiangdong** Principal Expert of State Grid Information and Telecommunication Group Co., Ltd.

开幕式

主持人：陈　梅

时　间：7 月 9 日，9:00-9:55

会　场：黄鹤厅

时间	致辞嘉宾
嘉宾致辞	**孟　晖** 武汉市人民政府副市长
	小野靖 日本电气学会（IEEJ）会长
	李埈豪 韩国电气学会（KIEE）会长
	周健德 香港工程师学会（HKIE）会长
	陈慧东 武汉大学校长助理
开幕致辞 及 主旨演讲	*中国新型电力系统的发展与实践* **郭剑波** 中国电机工程学会（CSEE）副理事长 中国电力科学研究院名誉院长

主旨报告

主持人：董旭柱，赵建军

时　间：7 月 9 日，9:55-12:25

会　场：黄鹤厅

时间	Keynote Session
09:55-10:20	*北斗 - 3/GNSS：智能电网的关键基础设施* **刘经南** 武汉大学教授
10:20-10:45	*日本第七版《战略性能源计划》及其技术挑战* **马场旬平** 东京大学教授
10:45-11:10	*基于永磁同步电机的单逆变器双电机驱动系统控制* **李教范** 亚洲大学教授
11:10-11:35	*高比例可再生能源接入下的电力系统保护挑战与应对策略* **陈福祥** 香港工程师学会前会长
11:35-12:00	*海上风电直流送出技术发展及三峡集团探索实践* **唐博进** 中国长江三峡集团科学技术研究院副院长
12:00-12:25	*电网时空数智技术应用实践与展望* **陈向东** 国网信息通信产业集团有限公司一级专家

8.2 Panel Sessions

Panel 1: Advanced motor and control technology

Chairs: Qu Ronghai, Gao Yuting, Jie Bo

Time: 14:00-17:20, July 9, Wednesday

Room: Shennongjia Hall

Time	Agenda
14:00-14:20	*Key Technologies of Variable Speed Pumped Storage Unit with Full–Size Converter* **Li Guifen** Harbin Electric Machinery Company Limited
14:20-14:40	*Open–Phase Fault–Tolerant Control for Brushless Doubly–Fed Induction Generator–DC Systems* **Liu Yi** Huazhong University of Science and Technology
14:40-14:50	
14:50-15:00	*Design of a Moving–Magnet Planar Motor Based on an Improved Trapezoidal Halbach Permanent Magnet Array* **Long Yuanjie**
15:00-15:10	
15:10-15:20	
15:20-15:40	Coffee Break

15:40-16:00	*Development and Application of Switched Reluctance Motor* **Wong Ka Fai** Hong Kong Polytechnic University
16:00-16:20	*Key Technologies and Applications of AC Excited Brushless Doubly–Fed Machines* **Chen Xi** Huazhong University of Science and Technology
16:20-16:30	
16:30-16:40	*The Finding of the Defects of an Smart Grid Wireless Networking Array Antenna Using Deep Learning Program* **Bae Jinwoo** Incheon National University
16:40-16:50	
16:50-17:00	*Harmonics and Stability Analysis in Active Damping Control for a SIDP PMSM Drive* **Jeon Jeong–Hwan** Ajou university
17:00-17:10	
17:10-17:20	

Panel 2: High voltage flexible transmission technology

Chairs: Yao Liangzhong, Ueda Yoshinobu

Time: 14:00-17:20, July 9, Wednesday

Room: Tianmen Hall

Time	Agenda
14:00-14:20	*Performance Evaluation and Enhancement of RES Grid–Forming Control* **Zhu Jiebei** Tianjin University
14:20-14:40	*Hybrid AC/DC Collection and HVDC Transmission Topology for Large–Scale Offshore Wind Farms* **Xiang Wang** Huazhong University of Science and Technology
14:40-14:50	*Numerical Investigation of Void Defect Detection in XLPE Cable Insulation Using Terahertz Wave Multi–Physics Simulation* **Luo Xiaoyu** Electric Power Research Institute of Guangdong Power Grid Co., Ltd.
14:50-15:00	
15:00-15:10	
15:10-15:20	*Smart and Sustainable Transmission Substation Development with Resilience Measures for Challenge from Climate Change* **Yeung Arras** CLP Power Hong Kong Ltd.
15:20-15:40	Coffee Break

15:40-16:00	*Watching Cases In The Domestic Industry of Flexible AC Transmission System* **Sungtek Kahng** Incheon National University
16:00-16:20	*Comparison on LCC and MMC HVDC Protection Design: A Review* **LAI Ming Him, Karl** The University of Hong Kong
16:20-16:30	*Large–Capacity Testing Method for Switching Devices in Flexible Low–Frequency (20Hz) Power Transmission Systems for Offshore Wind Energy* **Zhou Wenjie** Xi'an Jiaotong University
16:30-16:40	*Design and Operating characteristics of Interior Permanent Magnet Synchronous Motor for Electrical Vehicle Traction applications* **Kim MyoungSu Kim**
16:40-16:50	*Grid Connected Power Control Method of Linear Permanent Magnet Wave Energy Generation with Energy Storage* **Jiang Jianping** Harbin Institute of Technology
16:50-17:00	*Dynamic Virtual Impedance Control method of Grid–forming Converter Based on Sequence–Impedance* **Yang Huanyu** Harbin Institute of Technology
17:00-17:10	
17:10-17:20	

Panel 3: Renewable access and dispatch operation

Chairs: Gao Wenzhong, Wu Chao, Kaneko Nanae

Time: 14:00-17:20, July 9, Wednesday

Room: Qianjiang Hall

Time	Agenda
14:00-14:20	*Estimation of Wind Farm FM Capacity Based on Wind Power Probabilistic Prediction* **Ge Leijiao** Tianjin University
14:20-14:40	*Generalized Control Structure for Grid–forming Converters* **Wu Chao** Shanghai Jiao Tong University
14:40-14:50	
14:50-15:00	*A Review of An Organization´s Floating Photovoltaic Business Model and Future Strategies* **Bae Hyeonggyu** Korea Water Resources Corporation
15:00-15:10	*A Comprehensive Approach to a Sustainable Shipboard Energy System Modeling and Optimization with Renewable Integration* **Bhowmik Biddut** Hanyang University
15:10-15:20	*Fundamental Study on Temperature Characteristics of Hot–Spot Power in Parallel Cell Cluster Type PV Modules* **Itako Kazutaka** Department of Electrical and Electronic Engineering Kanagawa Institute of Technology

15:20-15:30	
15:30-15:50	Coffee Break
15:50-16:10	*Xinjiang New Energy Characteristics Profile: A Big Data–Driven Approach* **Chen Junru** Xinjiang University
16:10-16:30	*Analysis on Flexibility in a Practical Power System with High Penetration of Variable Inverter–Based Resources* **Dong Hee Choi** Kongju National University
16:30-16:50	*A Personalized Federated Learning for Tuning PV Inverter Parameters in Voltage Control* **Nanae Kaneko** Waseda University
16:50-17:00	*Research on Prediction Method of Photovoltaic Power by Deep Learning Using Meteorological Data* **Higa Kaisei** Kanazawa Institute of Technology
17:00-17:10	*An Aggregation Framework for Grid Flexibility Provision by Distributed Energy Resources of Residential Consumers* **Dong Chao**
17:10-17:20	

Panel 4: Intelligent hydropower and hydro-wind-solar integration

Chairs: XuJian, Liao Siyang

Time: 14:00-17:10, July 9, Wednesday

Room: Jingzhou Hall

Time	Agenda
14:00-14:20	*Prescriptive Maintenance and Operation with Deep Reinforcement Learning* **Tian Yuan** China Yangtze Power Co. ,Ltd,
14:20-14:40	*Key Technologies and Applications of Intelligent Gantry Crane for Ecological Water Regulation* **Dong Yuanfa** China Three Gorges University
14:40-14:50	*Hybrid Energy Infrastructure for Offshore Energy Hubs with on–turbine Hydrogen Production* **Liu Chao** Technical University of Denmark
14:50-15:00	*Comprehensive management strategy for centralized photovoltaic power stations against extreme heavy rainstorm in plain areas* **Liang Zheming** Huaneng Renewables Corporation Limited
15:00-15:10	*Grid–forming converter control parameter optimization for voltage support capacity enhancement* **Zhang Yuqian** Tsinghua University
15:10-15:20	*A Pulsed Power Stabilizing Control Strategy based on Virtual Impedance Matching for Hybrid Power Supply System of MEA* **Tao Ye** Harbin Institute of Technology

15:20-15:40	Coffee Break
15:40-16:00	*Research on Structural Optimization and Control Methods for the Demand Response of Magnetically Controlled Reactors* **Deng Youhan** China Yangtze Power Co. ,Ltd,
16:00-16:20	*Key Technologies for Flexible Complementarity and Intelligent Dispatching of Integrated Hydropower–Wind–Solar Systems* **Xu Jian** Wuhan University
16:20-16:30	*RESEARCH ON RESIDUAL ENERGY CAPTURE AND POWER GENERATION TECHNOLOGY FOR LOW HEAD AND HIGH FLOW CIRCULATING WATER TAIL WATER* **Wang Hai rui** Guoneng Guangtou Beihai Power Generation Co., Ltd.
16:30-16:40	*Analysis and treatment of abnormal hydrogen content in transformer oil of wind power station* **Xiaomei Lu** SDIC Guizhou New Energy Co., Ltd.
16:40-16:50	
16:50-17:00	
17:00-17:10	

Panel 5: Energy storage and electric vehicles

Chairs: Xie Jia, Hou Shaocong, Jae Woong Shim, Wu Fuzhang, Katsuya Sakai

Time: 9:00-12:20, July 10, Thursday

Room: Shennongjia Hall

Time	Agenda
9:00-9:20	*Research on Novel Aqueous Zn–MnO_2 Secondary Battery Technology* **Fan Xin** Chongqing University
9:20-9:40	*Photoelectronic Properties of Alternating Current Electroluminesce nt Composite Materials* **Wang Fuzhi** North China Electric Power University
9:40-9:50	*tatic Capacity Estimation for Retired of EV Battery Modules with Advanced Cell Capacity Estimations* **Choi Woongchul** Dept of Automotive Engineering
9:50-10:00	*A Study on the Construction of Battery Equivalent Circuits in Microgrids and the Stability of Power Supply* **Bian Ning** Meiji University
10:00-10:10	*Design and Operating Characteristics of Interior Permanent Magnet Synchronous Motor for Electrical Vehicle Traction Applications* **Kim MyoungSu Kim**
10:10-10:20	*Novel Autonomous Battery Voltage Equalizer via a Capacitively–Coupled ZETA–Inspired Converter* **Wei Zhengqi** City University of Hong Kong

10:20-10:30	
10:30-10:50	Coffee Break
10:50-11:10	*Assessing the Frequency Response of Data Center Back–to–back Inverter* **Jae Woong Shim** Sangmyung University
11:10-11:30	*Latest Renewable Energy Development and Applications in Hong Kong* **Wong Ka Fai** Hong Kong Polytechnic University
11:30-11:50	*Traffic Engineering Approaches to Planning Electric Vehicle Charging Networks* **Katsuya Sakai** The University of Osaka
11:50-12:00	*Grid Frequency Stabilization Control by Employing Coordinated Control of Heat Pump and Energy Storage System* **Jie Bo** University of Tokyo
12:00-12:10	*PatchTST–Based Method for Remaining Useful Life Trajectory Prediction of Generators Using Multivariate Data* **Kang Chan–Young**
12:10-12:20	

Panel 6: Power electronics devices and equipment

Chair: Chen Jianfei

Time: 9:00-12:20, July 10, Thursday

Room: Tianmen Hall

Time	Agenda
9:00-9:20	*Parallel Connection of SiC MOSFETs in Abnormal Conditions* **Li Helong** Hefei University of Technology
9:20-9:40	*High–frequency Current Source Converter: Device, Modulation and Control* **Li Ding** Harbin Institute of Technology
9:40-9:50	
9:50-10:00	*Comparison of Passive Filters and Software–Based Techniques for Overvoltage Mitigation in Motor Drive Systems with SiC Modules* **Moon Jae–Hwan** Ajou university
10:00-10:10	*Study on the Electrical Characteristics of a Vertical Self–Biased Channel Diode with a Split–Gate Electrode in a Fin Structure* **Kudoh Tsugutomo** Electrical and Electronic Engineering
10:10-10:20	*Design and Testing of Sand–Epoxy Motor Shells for Soundproofing in Solar Electric Vehicles* **Choy Tsun Man**
10:20-10:40	Coffee Break

10:40-11:00	*Stability Analysis And Operation Control of Wind–solar–storage Integrated Microgrid* **Wang Rui** Northeast University
11:00-11:20	
11:20-11:40	*Incidents and Lesson Learnt on Transformer Protection* **Lai Ming Him Karl** The University of Hong Kong
11:40-11:50	
11:50-12:00	
12:00-12:10	
12:10-12:20	

Panel 7: Electrical equipment and intelligent technologies

Chair: Yuan Jiaxin

Time: 9:00-12:20, July 10, Thursday

Room: Qianjiang Hall

Time	Agenda
9:00-9:20	*Usefulness of Magnetic Field Analyses on Magnetic Devices* **Kazuhiro Muramatsu** Saga University
9:20-9:40	*Flexibility and Digitalization Technology of Substation Main Equipment* **Jia Pengfei** China Electric Power Research Institute
9:40-9:50	*The Study on the Impact Analysis of Grounding Scheme in DC Local Grid and MVDC System* **Kwon Oh–Seung** Sungkyunkwan University
9:50-10:00	*A Study on the Automatic Control of Digital Substation Using Integrated IED* **Lee Yeonseok** Samsung Electronics
10:00-10:10	*Judgment of Deterioration of Transmission Tower Steel using Point Cloud Obtained from UAV for paper* **Ishino Ryuichi** The University of Electro-Communications
10:10-10:20	*Review of Multi–Modal Image Fusion Techniques for Enhanced Electrical Equipment Fault Detection* **Xu Baiyi**
10:20-10:30	*Multi–dimensional Condition Evaluation Method for Medium–voltage Power Distribution Cables at HK Electric* **Ke Zhu** HK Electric

10:30-10:50	Coffee Break
10:50-11:10	*Enhancing Resilience with Electric Vehicles Charging Re–Dispatching and Vehicle–to–Grid in Traffic–Electric Networks* **Yan Mingyu** Huazhong University of Science and Technology
11:10-11:30	*Advances in HVDC System Fault Current Limiting Technology* **Zhou Hang** Wuhan University
11:30-11:40	*Advanced Faulty Cell Detection in Lithium–Ion Batteries Using Balancing Parameters* **Choi Woongchul** Dept of Automotive Engineering
11:40-11:50	*Research on the Application and Development of Traveling Wave Fault Location Technology in Distribution Networks* **Xu Baiyi**
11:50-12:00	
12:00-12:10	
12:10-12:20	

Panel 8: Intelligent operation technology of power distribution system

Chairs: Wang Ying, Tian Ye, Bo Jie

Time: 9:00-12:20, July 10, Thursday

Room: Jingzhou Hall

Time	Agenda
9:00-9:20	*Simulation Technology for Coordinated Control of Distribution Networks with Large–Scale Distributed Resource Integration* **Liu Keyan** China Electric Power Research Institute
9:20-9:40	*Research and Application of Key Technologies for Multiple Types of MicroGrids in New Distribution Systems* **Bai Hao** CSG Electric Power Research Institute
9:40-9:50	
9:50-10:00	
10:00-10:10	*A Study on Voltage Flicker Suppression Method Considering Frequency Fluctuations of Interconnected Inverters* **Kusaba Ayano** Meiji University
10:10-10:30	Coffee Break
10:30-10:50	*TBD* **Sun Shumin** State Grid Shandong Electric Power Company

10:50-11:10	*Power Quality Mitigation in Distribution Grids Participated by Multiple Inverters* **Wang Ying** Sichuan University
11:10-11:30	*Empowering Power Systems: Present Applications and Future Perspectives of Intelligent Technologies* **Bo Jie** The Univerisy of Tokyo
11:30-11:40	*Optimization of Operational Planning Considering Uncertainty in EV Virtual Distribution Lines* **Hayagaki Keita** Kanazawa Institute of Technology
11:40-11:50	*Analysis of Voltage Flicler Occurrence Factors in Distribution System with Plural PV Systems* **Suzuki Ryushin** Meiji Univercity
11:50-12:00	*A Study on Estimating Energy Storage System Capacity Based on Renewable Energy Curtailment Rates* **Lee JoonHee** College of Engineering
12:00-12:10	
12:10-12:20	

Panel 9: Operation and control technologies of microgrids and distribution grids

Chair: Liu Chengxi

Time:14:00-17:40, July 10, Thursday

Room: Shennongjia Hall

Time	Agenda
14:00-14:20	*TBD* **Miao Weiwei** State Grid Shandong Electric Power Company
14:20-14:40	*Artificial Intelligence Methods for Distribution System Extreme Disaster Risk Warning and Optimization Decision–Making* **Li Gengfeng** Xi'an Jiaotong University
14:40-14:50	
14:50-15:00	
15:00-15:10	*Optimal Economic Operation Scheduling for Grid–connected Microgrids Using Different Optimization Methods* **Wu Guohong**
15:10-15:20	*Adam–based Distributed Algorithm of Multi–Energy Storage Cluster for Auxiliary Voltage Regulation* **xiong hui** Huazhong University of Science and Technology xiong

15:20-15:30	*Grid–forming Converter Allocation Optimization Considering Nodal Frequency Response* **Zhang Yuqian**
15:30-15:50	Coffee Break
15:50-16:10	*Multi–resource Collaborative Planning Method for Flexible Distribution Networks* **Ji Haoran** Tianjin University
16:10-16:30	*Multi–dimensional Condition Evaluation Method for MV Power Distribution Cables at HK Electric, Hong Kong* **Zhu Ke** The HongKong Electric Co. Ltd.
16:30-16:40	*Stability Control of Battery and PV Integration via Grid–Forming Inverter for Diesel Generator Replacement in Island Microgrid* **Sunjoh Christian Verbe**
16:40-16:50	*Demonstration of Wide–area Electricity Distribution Using Renewable Energy by DC Microgrid* **Katayama Hayato** Kanazawa Institute of Technology
16:50-17:00	

17:00-17:10	*Exploring Grid–Forming Inverters for Power System Applications Using Power Hardware–in–the–Loop and Digital Twin Approaches*	**Chow Man Hin**
17:10-17:20	*A novel variable–coefficient inertia support strategy for energy storage systems*	**Ling Zhu** Central South University
17:20-17:30	*Constrained Optimal Scheduling of Microgrids Using Forecast–Aware Safe Reinforcement Learning*	**Zhou Haorui** School of Electrical and Electronic Engineering, Huazhong University of Science and Technology
17:30-17:40	*5G+MEC Cloud–EdgeCollaborative Architecture forSmart Distribution Networks*	**zhang Yunpeng** Wuhan University

Panel 10: Artificial Intelligence for Power System Operation and Control

Chairs: Pu Tianjiao, Liu Junyong, Zhang Jun Jason, Shigenobu Ryuto

Time: 14:00-17:20, July 10, Thursday

Room: Tianmen Hall

Time	Agenda
14:00-14:20	*AI Empowering New Industrialization: Artificial Intelligence Application in the Energy Equipment Industry* **Li Yue** Dongfang Electric Corporation(DEC)
14:20-14:40	*Digital Twin Technology for Smart Operation and Maintenance of Offshore Wind Power Systems* **Wang Hua** China Huaneng Group Co., Ltd.
14:40-15:00	*Physics–Informed Intelligent Control and Operational Optimization for Power Systems* **Qiu Gao** Sichuan University
15:00-15:10	*Performance Trade–offs of Machine Learning Hyperparameters in On–board Charger´s Power Factor Correction Fault Classificatio* **Kang Changmook**
15:10-15:20	*Temporal Scenario Generation Strategy of Power System Based on Wasserstein Generative Adversarial Network with Gradient Penalty* **Yu Jizhou**
15:20-15:40	Coffee Break

15:40-16:00	*Renewable Power Forecasting Platforms: Enabling Smarter Grid and Market Operations* **Zhang Ke** China Three Gorges Wuhan Science and Technology Innovation Park
16:00-16:20	*Decision Intelligence Technologies and Applications in Power Systems* **Wang Yishen** China Electric Power Research Institute
16:20-16:40	*Research on the Application of Human–Machine Hybrid Intelligence Technology in Power System Risk Prevention and Control* **Xu Peidong** Wuhan University
16:40-17:00	*Research on the Impact of AI Teaching Assistants on Electrical Engineering Courses – A Case Study of the Course "Exploring the World of Electricity"* **Shi Kewei** Wuhan University
17:00-17:10	*Review of the Application Status of Artificial Intelligence Technology in Medium Voltage DC Integrated Power Systems* **Tian Zhen**
17:10-17:20	

Panel 11: Electricity-carbon synergies and electricity markets

Chairs: Liu Chao, Ye Yujian, Cui Xue

Time:14:00-17:20, July 10, Thursday

Room: Qianjiang Hall

Time	Agenda
14:00-14:20	*Swarm Intelligence for Coordinated Energy Management and Trading of Prosumers in Power Distribution Network* **Ye Yujian** Southeast University
14:20-14:40	*The Application of Electricity–Carbon Coupling Technology in Electrical Energy Systems* **Du Ershun** Tsinghua University
14:40-14:50	*Cost–Effectiveness and CO2 Reduction of Commercial EV Adoption Based on GPS Trajectory Data* **Ikeda Keiichi**
14:50-15:00	*Research on the Development of Mechanized Construction Industry Chain of Power Grid Engineering Based on ESG Concepts* **He Jianyu**
15:00-15:10	
15:10-15:20	*Grid–Forming Strategy for Flywheel Energy Storage Based on Matched Control* **Bi Yongjian** Institute of Electrical Engineering, Chinese Academy of Sciences
15:20-15:40	Coffee Break

15:40-16:00	*Challenges in ILOC Protection Design and Testing with Renewable Integration in High Utilization Grid* **Lai Ming Him Karl** The University of Hong Kong
16:00-16:20	*TBD* **Zhao Haoran** Shandong University
16:20-16:30	*Oberservation of Electricity Market Development in Shandong* **Li Zhang** Shandong University
16:30-16:40	
16:40-16:50	
16:50-17:00	
17:00-17:10	
17:10-17:20	

Panel 12: Youth Forum

Chair: Dong Jianghao

Time: 14: 00-18: 04, July 10, Thursday

Room: Jingzhou Hall

Time	Session
14:10-14:20	*Analysis of Asymmetric Faults in AC Networks Under Internal Potential Excitation with Amplitude–Frequency Periodic Time–Varying Modulation* **Li Yingbiao** Huazhong University of Science and Technology
14:20-14:30	*Research on CO_2 Capture Optimization and Resource Utilization Technology for Coal–fired Power Plants* **Gu Yongzheng** National Energy (Beijing) Low Carbon Technology Co., Ltd.
14:30-14:40	*High–reliability DC Conversion Technology and Equipment for Subsea Applications* **He Zhixing** Hunan University
14:40-14:50	*Theory of Electro–thermal Decoupling for SiC–based Medium–voltage Power Electronics Distribution Equipment* **Feng Hao** Chongqing University
14:50-15:00	*Research on Optimal Operation Technology for Distribution Microgrid Clusters Based on Game Reinforcement Learning* **Chen Sheng** China Electric Power Research Institute
15:00-15:10	*Technology and Application of Industrial Load Participation in Grid Interactive Control* **Liao Siyang** Wuhan University

15:10-15:20	*R&D of Silicone Gel Materials for High Voltage High Power Semiconductor Device Packaging*	**He Dongxin** Shandong University
15:20-15:30	Coffee Break	
15:30-15:38	*Optimal Operation Method for Smart Distribution Networks Considering Resilience Enhancement Under Extreme Weather*	**Wang Xu** Shanghai Jiao Tong University
15:38-15:46	*Key Technology Research and Application of Self–driven Intelligent Sensing Systems Based on Micro/Nano Energy*	**Wang Jiyu** Huazhong University of Science and Technology
15:46-15:54	*Operation Control of Park–level Integrated Energy System for Multi–timescale Frequency Support*	**Wang Cheng** North China Electric Power University
15:54-16:04	*Research on Precise Prediction Technology for New Energy Sources Across Multiple Spatial and Temporal Scales*	**Deng Weisi** Power Dispatching and Control Center, China Southern Power Grid
16:04-16:12	*Research on Key Technologies for Off–grid Zero–carbon Smart Islands*	**Du Yiyun** State Nuclear Electric Power Planning Design & Research Institute Co., Ltd.

16:12-16:20	*R&D of a Digital Twin Platform for Hydrogen Risk Early Warning–Mitigation–Emergency Response at Hydrogen Storage and Transportation Hubs*	**Li Yabing** CGN Research Institute
16:20-16:28	*Research on Lightweighting and Fault Operation Capability Enhancement of Offshore Wind Flexible HVDC Transmission Systems*	**Li Jinke** China Energy Engineering Group Jiangsu Electric Power Design Institute Co., Ltd.
16:28-16:36	*R&D and Application of High–Safety New Energy Storage Technologies*	**Wu Zhuoyan** China Three Gorges Corporation
16:36-16:44	*Key Technologies for Ultra–high Hybrid Tower Design Under Complex Cyclic Loading*	**Zhang Dongliang** PowerChina Huadong Engineering Corporation Limited
16:44-16:52	*Key Technologies for Rural AC/DC Distribution Networks Considering the Balance Between Economy and Resilience*	**Zhang Lu** China Agricultural University
16:52-17:00	*Research on Intelligent Blocking Measures for Cascading Failures in New Power Systems*	**Zhang Xi** Beijing Institute of Technology
17:00-17:08	*Research on Multi–energy Flow Modeling and Multi–objective Optimal Decision–making Methods for Park Energy Systems*	**Zheng Jiehui** South China University of Technology

17:08-17:16	*Research on Key Technologies for Smart Integrated Energy Systems*	**Zhong Di** China Huaneng Clean Energy Research Institute Co., Ltd.
17:16-17:24	*Fundamental Research on Adaptive Electric Field Regulated High Voltage DC Bushings*	**Yuan Zhikang** Tongji University
17:24-17:32	*Research and comprehensive demonstration of the construction technology of hierarchical and grouped power distribution system*	**Chao Pupu** Dalian University of Technology
17:32-17:40	*Transient Frequency–Voltage Coupling Mechanism and Control in New Power Systems*	**Yuan Kai** State Grid Economic and Technological Research Institute Co. Ltd.
17:40-17:48	*Research on Key Technologies for Certification of Large-scale Electric Vehicle–Grid Interaction*	**Qian Bin** Electric Power Research Institute, China Southern Power Grid Co., Ltd.
17:48-17:56	*esearch on Automatic Frequency Control Technology for Power Grids with High Penetration of Renewable Energy*	**Tan Chao** NARI Technology Co., Ltd.
17:56-18:04	*Energy Management Technology for Cluster Power Systems in Hydrogen Energy Rail Transit*	**Han Ying** Southwest Jiaotong University

Panel 13: High Voltage Forum - Environmental friendly insulating gases

Chairs: Zhong Lipeng, Zheng Yu

Time: 9:00-12:20, July 11, Friday

Room: Shennongjia Hall

Time	Agenda
9:00-9:20	*Multidimensional Structure– activity Relationships and AI–assisted Molecular Design for Eco–friendly Dielectrics* **Wang Baoshan** Wuhan University
9:20-9:40	*Measurement Techniques of the Arc Behavior and the Dielectric Recovery of Eco–friendly Gases in High Voltage Equipment* **Sun Hao** Xi'an Jiaotong University
9:40-9:50	*Difference in Heating Effect Due to Series and Parallel Resonance in Low–temperature Cooking Using Dielectric Heating* **Imai Kei** Tokyo University of Science
09:50-10:10	Coffee Break
10:10-10:30	*Eco–Friendly Power Equipment:Demonstration, Application & Critical O&M Strategies* **Liu Wei** Electric Power Research Institute of State Grid Anhui Electric Power Co. , Ltd
10:30-10:50	*Advanced Gas Sensing Method and Device for C4F7N and its Fault Decomposition Components* **Li Yi** Wuhan University
10:50-11:00	

11:00-11:10
11:10-11:20
11:20-11:30
11:30-11:40
11:40-11:50
11:50-12:00
12:00-12:10
12:10-12:20

Panel 14: High Voltage Forum - High voltage engineering and lightning protection technologies

Chairs: He Jinliang, Gu Shanqiang, Cai Li

Time: 9:00-12:20, July 11, Friday

Room: Tianmen Hall

Time	Agenda
9:00-9:20	*Raman spectroscopy detection method of operation status chemical parameters of power equipment* **Wan Fu** Chongqing University
9:20-9:40	*Lighting effect and lighting protection of integrated equipment from rocket–triggered Lightning* **Zhou Mi** Wuhan University
9:40-9:50	
9:50-10:00	*Stability Assessment procedures on Selection of Protection CT in Power System according to IEEE Std* **Moon Sucheol**
10:00-10:10	
10:10-10:20	*Incidents and Lesson Learnt from Transformer Protection* **Lai Karl M. H.** CLP Power Hong Kong
10:20-10:40	Coffee Break

10:40-11:00	*High–Performance hybrid Energy Harvesting Technology for Self–Powered Sensing in Power Grids* **Chen She** Hunan University
11:00-11:20	*Suppression of Global Lightning Occurrence Linked to the COVID–19 Period* **Liu Yakun** Shanghai Jiao Tong University
11:20-11:30	
11:30-11:40	*Gridded Lightning Activity Dataset with Marine Detection Efficiency Corrections for Offshore Wind Power Regions in China* **Wang Yu**
11:40-11:50	*Frequency Containment Reserve Scheduling with Aggregated Distributed Energy Resources Based on Copula–Based Frequency Forecasting* **Kaneko Nanae** Waseda University
11:50-12:00	
12:00-12:10	
12:10-12:20	

Panel 15: High-penetration power electronics-dominated power systems

Chairs: Geng Hua, Huang Meng, Cha Hanju

Time: 9:00-12:20, July 11, Friday

Room: Qianjiang Hall

Time	Agenda
9:00-9:20	*Research on Transient Stability Enhancement Technology for Grid–Forming Renewable Energy Sources Accounting for Control Switching Dynamics* **Zhou Shaoze** NARI Group Corporation
9:20-9:40	*Complex Behavior and Instability Mechanism of Grid–Connected Converter Systems* **Yang Jingxi** City University of Hong Kong
9:40-9:50	
9:50-10:00	*Impact of Grid Forming Inverters and Flywheel Synchronous Condensers on Power System Transient Stability Based on SIME Method* **Lee Yunjin**
10:00-10:10	
10:10-10:20	*Hybrid Energy Infrastructure for Offshore Energy Hubs with on–turbine Hydrogen Production* **Liu Chao** Technical University of Denmark

10:20-10:30	
10:30-10:50	Coffee Break
10:50-11:10	*DC Grid Stability Enhancement via Flexible Sequence Control under Renewable Energy Integration* **Jae Woong Shim** Sangmyung University
11:10-11:30	*TBD* **Cha Hanju** Chungnam National University
11:30-11:50	
11:50-12:00	
12:00-12:10	*Enhancing Voltage Stability and Power Quality in MVDC–Based MTDC Grids Under Unbalanced Conditions Using FPNSC* **Shim Jae Woong**
12:10-12:20	

Poster Session

Time: 14:00-17:00, July 9, Wednesday

Room: Corridors by Gate No.3

ICEE2025030000780	Transient Energy Equilibrium Point and Impact Degree Assessment Method for Transient Angle Stability of Power Systems Xiancheng Ren, Taishan Xu, Yanhong Bao, Feng Wu, Jinlong Zhang renxiancheng@sgepri.sgcc.com.cn
ICEE2025020002286	Study on dynamic support characteristics of inertia flywheel synchronous phase-modulated motor Zongyuan Xie, Shang lei, Lou Yantao xiezongyuan@whu.edu.cn
ICEE2025020001449	Enhanced state-space partitioning method for power system reliability assessment Xiaohui Ye, Lin Cheng, Wenbo Shao, Nan Yang, Jianglong bao, Lin Cheng, Yunting Song 819538839@qq.com
ICEE2025020001405	V2G-Distribution Grid Multi-Resource Cooperative Optimized Recovery Strategy using Highly Controllable Electric Vehicles Zheng Zhou, Mingming Wu, Yiheng Bian, Qiming Yang, Gengfeng Li, Chenyang Zhao 1592320439@qq.com
ICEE2025010001203	Analysis of Transformer Loss Measurement by Differential Voltage Differential Current Method Tianyuan Tan, Chuang Zhou, Zongkui Fu, Yipeng Mao 2022302191499@whu.edu.cn
ICEE2025030002516	Fast frequency and voltage support for flywheel energy storage system based on Amplitude-Phase-Locked-Loop Zongyuan Xie, Runsheng Zheng, Lei Shang, Xuzhu Dong xiezongyuan@whu.edu.cn

ICEE2025020002534	Research on Structural Optimization and Control Methods for the Demand Response of Magnetically Controlled Reactors Youhan, Deng, Hui, Cao, Dingguo, Jiang, Jiaxin, Yuan, Weiwei, Yao 972650211@qq.com
ICEE2025020001417	Calculation of DC Fault Current in HVDC Containing Saturated Core Fault Current Limiter Shaojie Chen, Haofeng Zhang, Yongsheng Xu, Wei Xiao, Bing Luo, Zheng Zhong, Jiaxin Yuan, Wanting Zhang, Hang Zhou, Jiajia Liu 819538839@qq.com
ICEE2025040005841	Small-Signal Stability Analysis of AC Networks with Grid-Forming Wind Turbines in Offshore Wind Farms Zhijie Zeng, Jialuo Wu, Jinyu Chen, Wei Jiang, Ye Tian
ICEE2025020002566	Dynamic Capacity Expansion Technology of Transmission Lines Based on BP Neural Network Huaming Yao, Youhan Deng, Hui Cao, Jiaxin Yuan, Weiwei Yao 13856141289@126.com
ICEE2025020002453	A Control Strategy for Seamless Transition of the FID Under Distribution Network Faults Xulin Zheng, Yilan Yu, Jingjing Bai, Haiquan Huang, Yang Zheng, Hao Ding, Lei Shang dingh12@js.sgcc.com.cn
ICEE2025020000761	Analysis of Action Logic and Case Simulation for Fast Bus Transfer Devices in the Power Supply System of Petrochemical Enterprises Ziyang Wang , Honghai Ke , Xiaolan Feng , Hongxiang Li, Yingbing Yang 17738039263@163.com
ICEE2025020002490	Control Strategy of Grid Side Converter and Fault Transmission Mode Based on Voltage Waves Runsheng Zheng, Lei Shang, Zongyuan Xie, XuZhu Dong mikez3@163.com

ICEE2025030001850	Scoring method for power operation steps based on local universal large language model Qiang Zhao, Lixiong Cao, Chunliang Zhang, Zhejian Wang, Zhikang Zhu, Qingwu Gong 1466767927@qq.com
ICEE2025020002364	Structural Analysis and Performance Optimization of Moving-Coil Permanent Magnet Planar Motor Laiqing Huang, Zhiyong Lan, Zhuofan Yi, Ziang Peng 2205051365@qq.com
ICEE2025020002350	Fuzzy Complementary Sliding Mode Control for Permanent Magnet Linear Synchronous Motors Jinwei Wu, Zhiyong Lan, Yuhang Wu, Bin Hu 1610011420@qq.com
ICEE2025040000466	Fault Type Diagnosis Method for Grounding Grids Based on Trends in Key Parameter Variations Liu Shaoyong, Liu Yaqing, Luo Jinwen, Le Lingling 1582960058@qq.com
ICEE2025010001125	Non-destructive Testing of Insulating Materials Defects Based on Terahertz Time-domain Spectroscopy System Xiaoyu Luo, Boxin Yan, Chao Wang, Ming Nie wchao@whut.edu.cn
ICEE2025040002585	AC flashover characteristics of arm-type composite insulators in heavily polluted areas under ice covering conditions Shirui Xu, Xueqin Zhang, Limei Hong, Yujun Guo, Song Xlao shiruixu@my.swjtu.edu.cn
ICEE2025040002533	The Influence of Bipolar Square Wave Voltage Parameters on the Electrical Tree Growth Characteristics of Epoxy Resin by Phase Field Model Qinhao Bu, Zhicheng Wu, Junjie Zhou, Hao Yang, Guoli Wang, Qiaogen Zhang 1042475218@qq.com

ICEE2025040002536	Propagation Characteristics of Acoustic Wave in Oil Paper Insulation and Its Influence on Acoustic Emission of partial discharge Junjie Zhou, Zhicheng Wu, Qinhao Bu, Jin Wang, Qiaogen Zhang junjie_zhou_c@163.com
ICEE2025030001579	Research Progress and Prospects of Data-Driven Models in Medium and Long-term Runoff Forecasting Guo Xihai, Hou Bingqi, Ge Songlin gelinsong789@126.com
ICEE2025030001230	Research on Electricity Supply Trends and Electricity Structure Under the Dual-Carbon Targets Li Chunhong, Zhao Yu, Li Yaran, She Jun, Wei Xinyu 157881246@qq.com
ICEE2025010002342	Research on a Comprehensive Diagnosis Algorithm for Insulation State of Relay Protection Secondary AC Circuit Hengchu Shi, Xiaofan Chen, Hao You, Xiao Hu, Yong Liang bhearo@163.com
ICEE2025010002033	Transitioning Coal-Fired Power Plants to a Low-Carbon Future: Exploring Renewable Energy Integration, Carbon Emission Reduction, and Energy Storage Solution MO, Wenze 2678273685@qq.com
ICEE2025020000159	Application of hollow core fibre in temperature acoustic wave sensing Li Deng, Bozhong Li, Jun Wu, Tong Chen, Yong Xiang, Yang Li, Peng Li, Jun Chu, Lei Zhang, Hongyan Zhou, Zhiyi Guo, Liping Ke, Litong Li zhouhongyan@yofc.com

ICEE2025010002698	Hollow core fiber assists power grid construction Li Deng, Bozhong Li, Jun Wu, Tong Chen, Hongyan Zhou, Yang Li, Peng Li, Jun Chu, Yong Xiang, Lei Zhang, Zhiyi Guo, Lixin Gu, Jie Luo zhouhongyan@yofc.com
ICEE2025010001447	Research on Grid Engineering Construction Management Innovation Based on ESG Concepts: Take the 500kV Li River Substation Project of Guangxi Power Grid as an Example Jingkui Jiang, Zhanpeng Tan, Kun Wang 717593993@qq.com
ICEE2025010001363	Research on Commutation Voltage Fluctuations and Arrester Optimization for Flexible Line Commutated Converters Yiming Ji, Fangjie Wu, He Zhu jiyiming44@163.com
ICEE2025010001161	Research on Performance Optimization of IGBT Chips Based on Next-Generation Digital Twin Technology: Enhancing Prediction Accuracy Through Data Assimilation Integration Xiao Li, Xiaoling Yan, Defang Zhang, Zhanpeng Tan neolixiao@gmail.com
ICEE2025040008058	Comprehensive Analysis of Power Generation Efficiency of Frame-type Gravity Energy Storage Technology Guowei An, Zhaolin Jia, Yingjiu Zhao, Zhaoguo Qiu, Yacong Yin 1192520858@qq.com
ICEE2025020000820	Overload Capacity Analysis of 500 kV Oil-Filled Submarine Cables in the Hainan Interconnection Project Shao Chenglin, Liu Qingsong, Sun Yong, Wang Zerui, Zou Liang, Han Zhiyun 2367416626@qq.com

ICEE2025020001048	Data-Driven Risk Assessment for Distribution System Maintenance with Resilient Reconfiguration Jun Deng , Hanzhen Yuan , Hongrui Lu, Yuxiong Huang, Ji Qiao, Minjie Jin xjtudengjun@stu.xjtu.edu.cn
ICEE2025020000585	Research on CVT Defect Warning in Complex Power Grids Based on Telemetry Signal and Topological Correlation Analysis Dan Zhou, Shuo Jiang, Linglong Cai, Zhiqin Ma 18929579389@189.cn
ICEE2025010001189	Sensitivity Analysis and Multi-objective Optimization Design of Bearingless Permanent Magnet Synchronous Motor Jiawang Pan, Hao Jiang, Zhenzhong Su panjiawang@hust.edu.cn
ICEE2025010000987	Arc fault diagnosis method of photovoltaic system based on multi-scale feature fusion Jiawei Cai, Changhong Weng, Longyang Zhu, Chuanjie Lin, Feng Cao, Feng Cao, Feng Cao caofengfzu@163.com
ICEE2025010000870	Research on three-dimensional space magnetic field simulation of three-core submarine cable based on finite element method Liu Shuai, Zhang Guipeng, Huo peng, Li Ruipeng, Ren Shaoyi 3472790366@qq.com
ICEE2025040007629	Three-Phase Unbalance Detection in High Scale Photovoltaic Distribution Grids Based on Graph Feature Learning Wenbin Xu, Baohua Wang 444656286@qq.com
ICEE2025040001027	Feedforward Fractional Repetitive Control for Harmonic Current Suppression in Magnetic Bearing Systems Yang Gao, Zhiquan Deng gaoyang922@nuaa.edu.cn

ICEE2025030002693	Study on Levelized Cost of Energy for Electrochemical Energy Storage and Economic Analysis under Different Operation Strategies in Electricity Markets Qi Zhang, Hao Wu, Yajing Li, Benjun Yang, Nan Xu bluecat0000@163.com
ICEE2025040001016	Active disturbance rejection control of magnetic bearing flexible rotor based on MA-LESO Yiqing Yang, Zhiquan Deng 18921120189@nuaa.edu.cn
ICEE2025040003330	Modeling study on effect of RF bias on inductively coupled plasma at medium pressure Zhijun Ai, Zhicheng Wu, Qingzhe Zhu, Zhengjie An, Qiaogen Zhang 1658984375@qq.com
ICEE2025040004017	Voltage Sag Loss Assessment for Sensitive User Loads Based on Deep Neural Networks Xue Wen, Shuaibin Shi, Yongli Liu, Shuang Qin 1519476983@qq.com
ICEE2025030000890	Analysis of Key Performance Indicators and Recommendations for the EM Surge arrester of the ±800kV UHV DC Converter Station Wang Lulu, Huang Jiarui, Zuo Zhongqiu, Chen Li wanglulu721@163.com
ICEE2025040005641	A highly oleophobic superhydrophobic coating using on a fluorinated epoxy resin for fire-proof self-cleaning applications in electrical cables Jiaqing Zhang, Lingxin He, Yi Guo, Jie Huang, Xia Zhou zhouxia@njust.edu.cn
ICEE2025040001036	Thermal Field Analysis of 1208 Type Stator Permanent Magnet Bearingless Slice Motor Wenqing Hao, Zhiquan Deng, Ying Xiong haowenqing@nuaa.edu.cn

ICEE2025020001076	Multi-Objective Coordinated Control Strategy for Hybrid Energy Storage System Based on Battery Grouping in Microgrids Kang Ni, Jiuqing Cai, Fang Wu, Rui Li nkhust@qq.com
ICEE2025020001352	Identification of Critical Links in Complex Power Systems Considering Cascading Failures Qirui Shen, Yaqun Wang, Yuxiong Huang, Fujia Han, Ji Qiao, Zhen Zhang shenqirui0211@163.com
ICEE2025010001466	Current Situation of Land Use for Upgrading and Renovation of Old Wind Farms and Policy Recommendations Shang Beibei, Xin An, Meiru Hu, Wuqiang Hu, Weihua Zhao, Xuan Liu 2567469196@qq.com
ICEE2025020000757	Research on Relay Protection Setting Calculation and Management Platform in Petrochemical Enterprises Wang Ziyang, Ke Honghai, Li Hongxiang, Feng Xiaolan, Yang Yingbing 1305082331@qq.com
ICEE2025020000833	Research on the power response characteristics of slope gravity energy storage grid-connected system based on mountains Yuefeng Yang, Shuo Mao, Gaopeng Guo, Jialin Zhang 18519021216@163.com
ICEE2025010000653	Research and application of green low-carbon multi-curved surface tile roof BIPV Qiumengjian, Chenchunming 104621221@qq.com
ICEE2025020001361	A Novel Fast-Switching Single-Core Phase Shifting Transformer for Flexible Power Flow Control Du Wanlin, Wang Ling, Luo Wei, Huang Shijie, Wu Qingyun 2254488317@qq.com

	Hybrid Magnet Design for Improved Demagnetization Resistance and Efficiency in IPMSM Song Sujin
ICEE2025010002005	Study on The Improvement of Eddy Current Losses In Permanent Magnets Kim DongHyeon jjiced@gmail.com
ICEE2025010002041	A Study on the Design and Implementation of a Dual Motor Drive System Based on a Five-Leg Inverter and LQR Control Lee Jae Hwan 2024020260@cju.ac.kr
ICEE2025010001832	Axial Flux Permanent Magnet Motor Design Optimization with Neural Network-Assisted Iron Loss Minimization Oh SeungMi ohseungmi@cju.ac.kr
ICEE2025040000470	Research on response of ground grid corrosion to state parameters of a large ground grid based on CDEGS Jiang Yutong 1417923620@qq.com

Poster Session

Time: 9:00-12:00, July 10, Thursday

Room: Corridors by Gate No.3

ICEE2025010000030	Research on Adaptive Control Algorithms Based on Virtual Synchronous Generators Guangzhe Sun, Ning Liu, Haoqi Xiao jonyive@mail.dlut.edu.cn
ICEE2024120001522	An Adaptive Tracking Algorithm for Burst OQPSK Modulation DSSS Systems HaiLong Zhang, EnGuo Zhu, MengXu Song, Ran Li, YuGuan Zhang zhl9903@126.com
ICEE2025010000207	High Power Test Methods for Switchgear of Flexible Low-frequency 20Hz Transmission System for Offshore Wind Power Wenjie Zhou, Zheyi Qu, Haibo Wang, Guan Hu, Zhanfeng Zheng, Ling Zhang zhouwenjie@sgepri.sgcc.com.cn
ICEE2025010000244	Driving Factors and Scenario Analysis of Carbon Emissions in Wuhan City: A STIRPAT Model Approach for Low-Carbon Development Chenxi Hu hcx6418@csepdi.com
ICEE2025010001002	Design of harmonic characteristic test platform for 110kV capacitive voltage transformer Haolu Liu, Kunxiong Liu, Hua Zhang, Wenna Zheng, Xiaoqing Zhang
ICEE2024120000043	Discussion on strength checking methods of thick-walled cylinders under different strength theories Ge Li, Haoliang Wang, Ze Li, Xin Xie, Haiyang Li ge-li@chder.com

ICEE2025020002554	A Magnetically Controlled Reactor-Based Integrated High-Low Transient Voltage Simulation and Regulation System Hui Cao, Youhan Deng, Dingguo Jiang, Jiaxin Yuan, Shengzhe Chen 1391416605@qq.com
ICEE2025010000207	High Power Test Methods for Switchgear of Flexible Low-frequency 20Hz Transmission System for Offshore Wind Power Wenjie Zhou, Zheyi Qu, Haibo Wang, Guan Hu, Zhanfeng Zheng, Ling Zhang zhouwenjies@qq.com
ICEE2025010001363	Research on Commutation Voltage Fluctuations and Arrester Optimization for Flexible Line Commutated Converters Yiming Ji, Fangjie Wu, He Zhu jiyiming44@163.com
ICEE2025010000810	Dynamic Switching Strategy and Fault-Tolerant Control Between Dual Six-Phase PMSM and Open-Winding PMSM Sheng Ai, Zhong Ran, Xunzhi Yan, Dan Mei aisheng23@nue.edu.cn
ICEE2025040006097	Review of Offshore Wind Power Collection Systems and Key Technological Developments Qiuyu Lu, Yinguo Yang, Junsheng Chen, Yang Liu, Nian Liu, Fei Cao zwanting131@163.com
ICEE2025060011979	Fast Frequency Support in Islanded Microgrids Using a Grid-Forming Energy Storage Coordinated with Renewable Primary Control Zheng Xulin dingh12@js.sgcc.com.cn
ICEE2025010000415	Study on the Electrical Characteristics of Vertical Self-Biased Channel Diode with a SplitChannel Diode with a SplitChannel Diode with a Split-Gate Electrode Tsugutomo Kudoh, Masashi Kobayashi

ICEE2025010000541	Fundamental Study on Temperature CharacteristicsofHot-Spot Power in Parallel Cell Cluster Type Chihiro Toishi , Kazutaka Itako, Tsugutomo Kudoh
ICEE2025010000565	Development of Tone Evaluation Device Rio Yabuta, Kazutaka Itako
ICEE2025010000759	Design and Operating Characteristics of IPMSM for Electric Vehicle Traction Applications MyoungSu Kim
ICEE2025010000866	Research on Battery Management Systems Integrating Factor Graph Optimization and State Space Models Lei Zhang, Daisuke Tashima
ICEE2025010001640	Power System Inertia Estimation Using Local Frequency Measurements Yukai Wang, Jumpei Baba
ICEE2025010001780	Design of Optical System for measuring the Beam Profile of High-intensity Laser Light using Light Scattering Phenomena Koichi Miyazaki
ICEE2025010001937	Characteristic Evolution of the Retrofilled Synthetic Ester during Grid-connected Operation for 10 kV Power Transformers Zhao Yifeng , Qian Yihua, Wang Qing , Peng Lei, Li Zhi
ICEE2025050013558	Performance Estimation of IPMSM and its Drives Considering Magnetic Nonlinear Phenomena for EV Traction Applications geo seung choi

ICEE2025010000653	Research and Application of Building-IntegratedPhotovoltaics (BIPV) Technology for Multi-Curved TileSloping Roofs Chen Chunming
ICEE2025020002140	Temporal Scenario Generation Strategy of Power System Based on Wasserstein Generative Adversarial Network with Gradient Penalty Rong Yan, Jizhou Yu, Ke Wang, Shiqi Liu, Zhantao Fan, Zhengbo Shan, Xinyue Yu, Dawei Liao, Jun Zhang jizhou_yu@whu.edu.cn
ICEE2025020002433	Design of a Moving-Magnet Planar Motor Based on an Improved Trapezoidal Halbach Permanent Magnet Array Yuanjie Long, Zhiyong Lan, Fu Li, Qinglai Huang 934466217@qq.com
ICEE2025020001465	Research on the Application and Development of Traveling Wave Fault Location Technology in Distribution Networks Baiyi,Xu, Mingyang Wang, Jintong Ma, Du Xue, Jiang Rongrong xuby@im.gzgy.csg
ICEE2025010001242	Research on the Construction Path of a New Rural Power System Oriented by the Entire Process and Multiple Scenarios Su Xiaobing, Zheng Yuan, Zeng Junhui
ICEE2025010001122	A Research on the Application of Digital Twin and Artificial Intelligence in Underground Construction of Urban Power Grid Fansheng Kong, Xuanhua Hong, Bin Zhang
ICEE2025040005672	A Two-Stage Artificial-Neural-Network Method for Predicting the Severe Thunderstorm Potential and Intensity Yang Han
ICEE2025040001582	Research on Dynamic Control Strategy of Static Var Generator Based on Particle Swarm Optimization Algorithm Yuhang Lai

ICEE2025040002573	High Power Test Methods for Switchgear of Flexible Low-frequency 20Hz Transmission System for Offshore Wind Power Wenjie Zhou, Zheyi Qu, Haibo Wang, Guan Hu, Zhanfeng Zheng, Ling Zhang
ICEE2025010000573	Intelligent Identification of On-site Violation Behaviors in Power Industry Du Xian, Huang Nan, Yang Qi, Zhao Ke, Li Dailin, Chen Dalei
ICEE2025030001971	Grounding DINO with Text-guided Deformable Attention Mechanism for Power Transmission Inspection Xin Huang, YiBo Chen, Chao Tang, Shi Zhu, Zhen Tian
ICEE2025010001081	Research on the Application of Edge Gateway in Power Systems Based on Plug-and-Play and Containerized Deployment Sen Yang, Guoshan Teng, Jishuang Zhao, JiajiaHe
ICEE2025040004378	Application of X-ray Flaw Detection Technology for Strain Clamps in Transmission Lines Du ZhenJun, Liu YaRong
ICEE2025030001012	Discussion on investment management of overseas hybrid energy projects Yuan Hongwei, Chen Hong Tao
ICEE2025050003650	Optimization of Resilience Enhancement in Hydro-Wind-Solar Power Systems Under Continuous Multi-Day Extreme Scenarios Zixi Sang, Xianxun Wang, Yaru Liu
ICEE2025040001811	Research on Hot-spot Temperature Rise Prediction in Oil-Immersed Transformer Windings Based on Porous Media Theory Wang yukuo, Li yan, Yu zhanyang

ICEE2025030000558	ANALYSIS AND INSTALLATION OF CABLE-WAY FOR TRANSPORTING CONSTRUCTION EQUIPMENT ACROSS THE RIVER Chen Hongtao
ICEE2025010001208	Based on Particle Swarm Optimized Neural Network for Ice Coating on Transmission Lines Prediction Zhang YaoQiang, Hao XiaPeng 1766189506@qq.com
ICEE2025010001195	A Research of the Construction of Sustainable Information Disclosure Model for Power Grid under the New Power System Chen Haofeng, Chen Xi
ICEE2025020001203	Application of GaAs Fiber Optic Temperature Measurement Technology in a 550MW Hydro-generator Zhangwu Yang, Lin Chen, Li Ma, Lu He, Jinchen Zhu, Lihao Tuo
ICEE2025010000518	Multi-time scale optimal scheduling of distribution network based on accurate ultra-short-term load forecasting Yaoqiang zhang, Chenyang Pang, Huadong Guo, Dong Miao 764289067@qq.con
ICEE2025020000613	Review of Multi-Modal Image Fusion Techniques for Enhanced Electrical Equipment Fault Detection Baiyi,Xu, Mingyang Wang, Jintong Ma, Du Xue, Jinzhou Lai xuby@im.gzgy.csg
ICEE2025020000615	Research and Application of an Intelligent Acceptance System for Overhead Distribution Networks Based on Computer Vision and 3D Point Cloud Technology Baiyi,Xu, Mingyang Wang, Jintong Ma, Du Xue, Wang Qiao xuby@im.gzgy.csg
ICEE2024120001571	Research on collaborative control of wind farm wake based on a double-layer architecture model zhang huiguang, shao lili, cai gaoyuan, li bingbing, wei qinghai

ICEE2025020002779	The Application of Fiber Bragg Grating Monitoring Technology in Measuring the Temperature of Hydro-generator Bearings Lin Chen, Zhangwu Yang, Lu He, Li Ma, Lihao Tuo, Jinchen Zhu
ICEE2025010000861	Research on Edge Gateway Model Based on Data Format Fusion and Intelligent Plug-and-Play Technology Li Honghao, Zhao Jishuang, He Jiajia
ICEE2025010001153	Alkali Ions Preintercalated NH4V4O10 for Durable and Rapid Aqueous Zinc–Ion Batteries Xuejun Zhu, Yuqi Peng, Zhanpeng Tan, Long Wang, Linhua Hu
ICEE2025020001070	Simulation analysis of transformer temperature field-flow field based on porous media Yukuo Wang, Yan Li, Zhanyang Yu, Xiongbo Wang, Xiuxian Qi
ICEE2025010001707	Broadband Oscillation Suppression Active Power Filter for Power Quality Management in Offshore Wind Farms Zhang Zhuoyu, Duan Zhouchao, Tang Haiyan, Shen Xuhui, Zhao Ruibin, Wang Beining 100034460@qq.com
ICEE2025010001708	Research on the Development of Mechanized Construction Industry Chain of Power Grid Engineering Based on ESG Concepts Jianyu He, Fanghua Ma, Kun Wang, Zhanpeng Tan 59126619@qq.com
ICEE2025010001212	Smart and Sustainable Transmission Substation Development with Resilience Measures for Challenge from Climate Change Ip, Anthony Wai Leung, Yeung, Arras Yuk Yin yeungarras@yahoo.com
	The Function of SPWM Controllers in Power System Stability Hao Lee

ICEE2025050011384	Research on PID-Based Control Method for Electric Vehicle Load Participation in Grid Auxiliary Peak Shaving Ye Qiang 1805164590@qq.com
ICEE202506000841	Optimal Design of High-Power Vacuum Bypass Switch for High-Capacity Modular Multilevel Converter under Extreme Operating Condition 24121273@bjtu.edu.cn
ICEE2025010002021	Development of a Dynamic Ensemble-Based Online Load Forecasting Model for Adapting to Performance Variations Lee Dae Sung leeds96@gachon.ac.kr
ICEE2025010001312	Procedure for Determining the Control mode and parameter of Smart Inverters in Distribution System with multiple DERs Kim Chang-min kcm31@naver.com
ICEE2025010000278	Capacity Optimization of Battery and Hydrogen Energy Storage Systems in Renewable-dominant Power Systems considering Hydrogen Load: A Case Study of Jeju Island, South Korea Kim Seyon ksy990806@snu.ac.kr
ICEE2025010000439	Implementation of an OPAL-RT based PHILS environment for testing step voltage regulator conller Choi Yon Hum lion5220@naver.com
ICEE2025010001678	Coordinated Control of Hybrid DC Shipboard Power Systems with SOFCs and Variable-Speed Diesel Generators Aziz Muhammad az1869@kookmin.ac.kr
ICEE2025010001939	Integrated Load Management and Pricing Strategies for Congestion Mitigation in DSO-VPP Coordinated Distribution Systems Maulana Ilham Ramadhan ilhamrm@kookmin.ac.kr

ICEE2025020001108	A Two-Stage Historical-Correlation-Driven Robust Coordinated Optimization for Hydrogen-Integrated Microgrid Considering Renewable Energy Uncertainty with Distribution System Lee Mingi minji0530@korea.ac.kr
ICEE2025040003528	Enhanced state-space partitioning method for composite power system reliability assessment Wenbo Shao 819538839@qq.com
ICEE2025010001256	Evaluation of SCR-Based Strength Measures Using Maximum Allowable Power Under Synchronous Generator Operating Conditions Park Jun-Seok jspark0425@snu.ac.kr
ICEE2025010001842	Enhancing Reactive Power Capability of Distributed Energy Resources Using STATCOMs for Grid Code Compliance Park Jaewan p2783@kookmin.ac.kr
ICEE2025010001764	Enhanced Secondary Droop Control for Mitigating Power Exchange Deviations in Multi-Terminal MVDC Distribution Systems Nam Kiwoong rldnd715@kookmin.ac.kr
ICEE2025020001332	Abstract-Research on the Wind Field Distribution Characteristics of Transmission Lines in the Micro-topography Environment of High Mountain Watershed bingjie bai, qing lin, shanqiang gu, dong han , ze liu, yan li, chao gao, jie chen 452317814@qq.com
ICEE2025020001358	Research on the Prediction Method of Transmission Line Icing Risk Based on Micro-meteorological Feature Extraction Bingjie Bai, Zhe Li, Lei Zhang, Kuan Wen, Fengquan Li, Zhibo Jiang, Gang Qiu, Nailong Zhang 452317814@qq.com

ICEE25010001306	An Analysis of the LVRT Capability Based on Wind Generators and STATCOM Operation in Large-Scale Offshore Wind Farms Yoon Seongmin ysm1091@naver.com
ICEE202501000109	Application of Single-phase Power Conversion System using Instantaneous Control Technique and Analysis of Frequency Response Characteristics according to Proposed Filter Design Jang Jin Hyuck asdas22@gachon.ac.kr
ICEE2025010001519	Analysis of Reactive Power Compensation Analysis of Δ-Y Connected TCR-TSC for Modern Power System Loads Jae Gun Lee lydagun@gachon.ac.kr
ICEE2025010000697	Performance Analysis of Power Factor Improvement and Neutral Current Reduction by Harmonic Mitigation in Power Facilities for Digital Load Compensation Lim Jong-ho whdgh9873@gachon.ac.kr
ICEE2025010002096	Optimal Operation of On-site Energy Superstation Including PEM Water Electrolysis and Fuel Cells Kim Geonwoo rjsdn7612@gachon.ac.kr
ICEE2025010001260	Study on Static Network Reduction Method Using LODF to Consider Contingency Analysis Choi Jin-Ho jhchoi@kentech.ac.kr

9. Tech Safari

Route 1

Wuhan Modern Smart Distribution Grid Demonstration Zone

Time	Schedule	Place
14:00	Gathering and Boarding	Departure Point:Tingtao Gate 2
14:00~14:25	Shuttle Bus to Wuhan Modern Smart Distribution Grid Demonstration Zone	
14:25~15:00	Visit Wuhan Modern Smart Distribution Grid Demonstration Zone	State Grid Wuchang Power Supply Company
15:30~16:00	Back to East Lake Hotel	

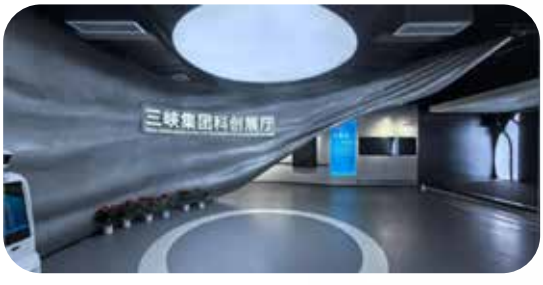
The Wuhan Modern Smart Distribution Network Demonstration Zone, namely the Wuchang A+ "High-Reliability" and Dongxihu "Flexible Interaction" distribution network demonstration projects, were launched in 2023. The Wuchang A+ "High-Reliability" project aims to build a strong and intelligent distribution network by developing advanced applications of the distribution network intelligent control system and digital twin platform, exploring the construction of a smart distribution network with high power supply reliability in urban core areas. The Dongxihu "Flexible Interaction" project coordinates the elements of source, grid, load, and storage, mastering the key technologies of interaction between photovoltaics, electric vehicles, and distribution networks, and promoting the clean and low-carbon energy transformation in rural areas, such as the Dongfeng Community. The demonstration zone showcases a modern smart distribution network that is safe, efficient, clean, low-carbon, flexible, and intelligent.

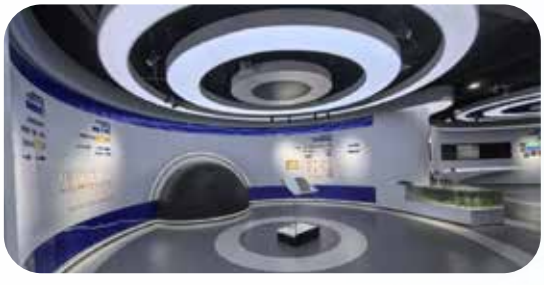
Route2

China Three Gorges Group Science and Innovation Exhibition Hall

Time	Schedule	Place
14:00	Gathering and Boarding	Departure Point:Tingtao Gate 2
14:00~14:45	Shuttle Bus to China Three Gorges Group Science and Innovation Exhibition Hall and Joint Laboratory of Hydro-Wind-Solar Multi-Energy Control Coordination	
14:45~16:30	Visit China Three Gorges Group Science and Innovation Exhibition Hall and Joint Laboratory of Hydro-Wind-Solar Multi-Energy Control Coordination	China Procurement Center T4 Building
16:30~17:30	Back to East Lake Hotel	

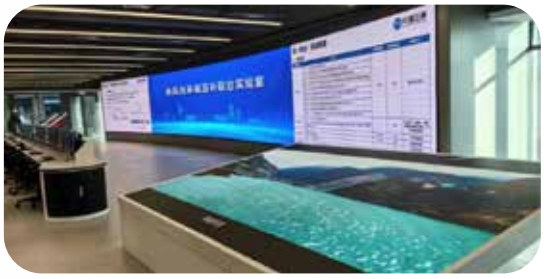
The China Three Gorges Group Science and Innovation Exhibition Hall provides a detailed introduction to the group's journey in overcoming world-class challenges in the hydropower field, such as large river cutoff, deep-water cofferdam construction, high dam construction technology, and the manufacturing of giant hydro-generator units. It demonstrates the group's technological strength and innovative spirit in the field of clean energy. The exhibition hall also presents the group's continuous efforts and achievements in extending the innovation chain and improving the industrial chain.





Hydro-Wind-Solar Multi-Energy Complementarity Joint Laboratory

The Hydro-Wind-Solar Multi-Energy Complementarity Joint Laboratory was officially established in October 2022. The laboratory is led by China Yangtze Power Co. , Ltd. , jointly built by the Three Gorges Group Science and Technology Research Institute and Wuhan University, and co-constructed by units such as the China Southern Power Grid, Yunnan Power Grid Co. , Ltd. , and the Yangtze River Water Resources Commission. Focusing on the national clean energy development strategy, the laboratory addresses the technical issues of hydro-wind-solar multi-energy complementarity based on hydropower. Taking the integrated construction of the Jinsha River downstream hydro-wind-solar complementary clean energy demonstration base as an opportunity and closely meeting the needs of the new power system construction, the laboratory strengthens the combination of basic key technology research and practical application research, and conducts in-depth research on the core scientific and technological issues in the integrated construction and operation of hydro-wind-solar.



10. Meals and Coffee Breaks

July 8	18:00-20:00	Welcome Reception	Huangli Hall
July 9	12:35-14:00	Lunch	Huangli Hall
	15:30-15:50	Coffee Break	
July 10	10:30-10:50	Coffee Break	
	12:20-14:00	Lunch	Huangli Hall
	15:30-15:50	Coffee Break	
	18:00-20:30	Conference Banquet	Yangtze River Hall
July 11	10:30-10:50	Coffee Break	
	12:20-14:00	Lunch	Huangli Hall

11. Useful formation

11.1 Registration Location

No.2 Tinatao Floor 1F Registration and Sign-in Desk

11.2 Registration

(1) Online registration: Participants who have registered online and paid the registration fee, go to the corresponding check-in counter to report the registration number, get the information paclage, and pay the accommodation fee at the hotel for check-in.

(2) On-site registration: You need first go to the registration desk to fill out the participant information form, get the information package, and pay the registration fee at the fee counter.

11.3 Simultaneous Interpretation Headset

The delegates can find the Simultaneous Interpretation Headset on the table. Please take care fo the equipment and put it back on the table after the meeting.

11.4 Delegate Badge

You are required to wear your delegate badge to all activities of the Conference and are requested to keep it in a safe place.

11.5 Conference Secrateriat

Conference website: https://icee2025.csee.org.cn/index.html

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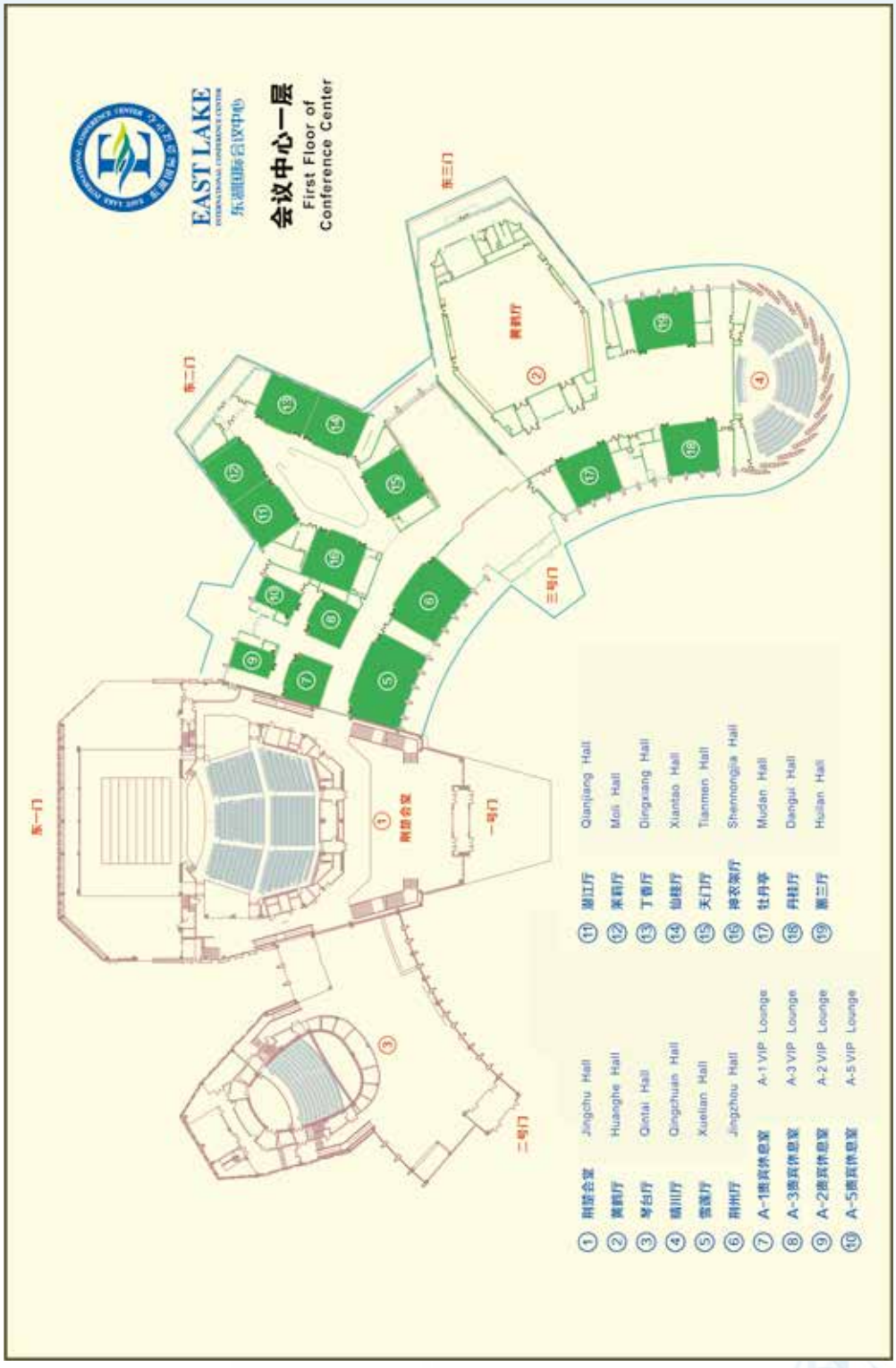
12. Layout of Conference Rooms




72m²
A3
贵宾室
112m²
神农架厅
仙桃厅
190m²
雪莲厅
约220m²
160m²
荆州厅
112m²
天门厅
约300m²
700m²
黄鹤厅
Poster Session区域
约120m²
三号门
Poster Session区域
约180m²
慧兰厅
约300m²
112m²